



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	F	TILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,046		01/11/2002	John Addink	100302.0016US1	8668
34284	7590	09/10/2004	,	EXAMI	NER
ROBERT I	D. FISH		RODRIGUEZ, PAUL L		
RUTAN & TUCKER LLP 611 ANTON BLVD 14TH FLOOR				ART UNIT	PAPER NUMBER
0111111		92626-1931		2125	
				DATE MAILED: 09/10/2004	\wedge

Please find below and/or attached an Office communication concerning this application or proceeding.

X

*							
	Application No.	Applicant(s)	3/				
	10/031,046	ADDINK ET AL.	Q\				
Office Action Summary	Examiner	Art Unit					
3	Paul L Rodriguez	2125					
The MAILING DATE of this communicated period for Reply	ation appears on the cover shee	t with the correspondence ac	ldress				
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNIC. - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commun. - If the period for reply specified above is less than thirty (30) of the period for reply is specified above, the maximum statul. - Failure to reply within the set or extended period for reply will Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	ATION. 37 CFR 1.136(a). In no event, however, maication. days, a reply within the statutory minimum or tory period will apply and will expire SIX (6) II, by statute, cause the application to become	by a reply be timely filed f thirty (30) days will be considered time MONTHS from the mailing date of this of the ABANDONED (35 U.S.C. § 133).	ly. communication.				
Status							
1) Responsive to communication(s) filed	on <i>01 July 2004</i> .						
·— ·) This action is non-final.						
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) 1-5,7,8,10-19 and 21-28 is/are 4a) Of the above claim(s) is/are 5) Claim(s) is/are allowed. 6) Claim(s) 1-5, 7, 8, 10-19 and 21-28 is 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction Application Papers 9) The specification is objected to by the latest to the subject to the subj	withdrawn from consideration. /are rejected. on and/or election requirement. Examiner. a) accepted or b) objected on to the drawing(s) be held in above the correction is required if the drawing of	to by the Examiner. eyance. See 37 CFR 1.85(a). ving(s) is objected to. See 37 C					
Priority under 35 U.S.C. § 119							
12) ☑ Acknowledgment is made of a claim fo a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☑ Certified copies of the priority do 2. ☐ Certified copies of the priority do 3. ☐ Copies of the certified copies of application from the International	ocuments have been received. Ocuments have been received in the priority documents have been larged at Bureau (PCT Rule 17.2(a)).	n Application No een received in this National	Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-3) Information Disclosure Statement(s) (PTO-1449 or PT Paper No(s)/Mail Date	D-948) Paper	ew Summary (PTO-413) No(s)/Mail Date of Informal Patent Application (PTo	O-152)				

Page 2

Application/Control Number: 10/031,046

Art Unit: 2125

DETAILED ACTION

1. The amendment filed 7/1/04 has been received and considered. Claims 1-5, 7, 8, 10-19 and 21-28 are presented for examination.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. See previous office actions and pages 2-3 of the instant applications specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "the water usage data" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Page 3

Application/Control Number: 10/031,046

Art Unit: 2125

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, 10, 12-15, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Collins (U.S. Pat 6,402,048). The claimed invention reads on Collins as follows.

Collins discloses (claim 1) an irrigation system (figure 1) comprising each of an irrigation controller (reference number 100) and a water application device (reference number 102) physically situated at a location of a user (figure 5, col. 9 line 64 – col. 10 line 42), the controller at least partially controlling the water application device (col. 10 lines 1-60), a communication system that exchanges monitoring information between the irrigation controller and a government agency wherein the communication system comprises a public, packet switched network (col. 20 lines 34-58, Examiner considers the ETo information as monitored information), (claim 2) wherein the exchange of monitoring information with the irrigation controller and the government agency is bi-directional (Internet is inherently bi-directional, col. 20 lines 51-58), (claim 3) further comprising a microprocessor (reference number 170, 214) disposed in the irrigation controller, that facilitates the exchange of monitoring information between the irrigation controller and the government agency (col. 20 lines 51-58), (claim 4) further comprising a microprocessor disposed in a unit separate from the irrigation controller, that facilitates the exchange of monitoring information between the irrigation controller and the government agency (col. 20 lines 51-58, Inherent, information transferred to the irrigation controller via the Internet, a second unit at the government agency would require an Internet capable device, which are known to comprise a microprocessor), (claim 5) further comprising a storage device that stores data at the user location (reference number 172, 174), (claim 10) a

Art Unit: 2125

method of operating an irrigation system (abstract) comprising physically situating each of an irrigation controller (reference number 100) and a water application device (reference number 102) at a location of a user (figure 5, col. 9 line 64 – col. 10 line 42), utilizing the controller to at least partially control the water application device (col. 10 lines 1-60), providing a first communication system comprising a public, packet switched network (col. 20 lines 34-58) coupling the irrigation controller and a government agency using the first communication system (col. 20 lines 51-58), exchanging monitoring information between the irrigation controller and the government agency (col. 20 lines 34-58, Examiner considers the ETo information as monitored information), (claim 12) further comprising providing the controller with a microprocessor programmed to receive additional information from a distal computer via a second communication system (col. 10 lines 23-33, col. 21 line 11 – col. 24 line 54, remote programming via 110), and the microprocessor determining an irrigation schedule based at least in part on landscape irrigation operating information from the user and the additional information from the distal computer (col. 14 lines 25-50), (claim 13) further comprising: providing the controller with local water usage data; and the microprocessor determining an irrigation schedule based at least in part on the water usage data (col. 19 line 9 – col. 20 line 32 and claim 16), (claim 14) wherein the step of determining an irrigation schedule further includes the microprocessor computing a desired quantity of water to be applied to a landscape at the user's location for a specific period of time (col. 29 line 53 – col. 30 line 54, claim 16), (claim 15) wherein the period of time is at least one day (col. 12 line 46-64, col. 24 lines 38-44), (claim 18) wherein the water usage data includes water pressure data (col. 13 lines 6-13) and (claim 19) further comprising coupling the user and a distal computer using a third communication system

Art Unit: 2125

(col. 10 lines 7-11). Examiner would like to point out that any reference to specific figures, columns and lines should not be considered limiting in any way, the entire reference is considered to provide disclosure relating to the claimed invention.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 7, 8, 11, 25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (U.S. Pat 6,402,048) in view of Peek et al (U.S. Pat 6,343,255).

Collins teaches most all of the instant invention as applied to claim 1 above and also teaches the user entering landscape irrigation operating information and transmitting the information to the irrigation controller via a second communication system (col. 10 lines 23-33,

Application/Control Number: 10/031,046 Page 6

Art Unit: 2125

col. 21 line 11 – col. 24 line 54, remote programming via 110) and teaches the monitoring of flow rate information (col. 2 lines 9-31).

Collins fails to teach wherein the communication system comprises a two-way pager, wherein the communication system comprises a web page interface, entering landscape irrigation operating information into a personal computer and the personal computer transmitting the information to the irrigation controller via a second communication system sending information from a distal computer to the government agency, such information including irrigation operating information and wherein the monitoring information includes at least one of a start time, a run time, water flow data and water pressure data.

Peek et al teaches (claim 7) wherein the first communication system comprises a two-way pager (col. 8 lines 49-58, known pager functions), (claim 8) wherein the first communication system comprises a web page interface (col. 7 lines 47-50, figure 8, provide Internet interfaces for displaying data, considered a web page), (claim 11) entering the landscape irrigation operating information into a personal computer and the personal computer transmitting the information to the irrigation controller via the second communication system (col. 4 lines 9-14, col. 7 lines 4-13), (claim 25) sending information from the distal computer to the government agency, such information including irrigation operating information (col. 6 lines 27-46, because of the various modes of communication, especially the Internet, information being sent to any destination would be obvious) and (claim 27, 28) and wherein the monitoring information includes at least one of a start time, a run time, water flow data and water pressure data (col. 5 lines 41-53).

Art Unit: 2125

Collins and Peek et al are analogous art because they are both related to a system and method of performing irrigation control.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the communications of Peek et al in the irrigation controller of Collins because Peek et al teaches an irrigation system that can provide accurate microclimate information from a plurality of weather stations, can receive notification if weather conditions could cause damage to crops, and receives customized information that reflects the particular crop, field configurations and weather conditions, that will assist the user with proper application of irrigation to crops, which would increase crop production and minimize crop losses (col. 3 line 58 – col. 4 lines 32).

8. Claims 16, 17 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (U.S. Pat 6,402,048) in view of Miller (U.S. Pat 5,479,339).

Collins teaches most all of the instant invention as applied to claim 1 above. Collins fails to teach wherein the additional information from the distal computer includes weather data, and further comprising the microprocessor computing an ETo value, the microprocessor comparing the ETo value to a desired quantity of water applied to the landscape, a microprocessor sending a warning to the user via a second communication system when an aspect of the irrigation system falls outside of a predetermined parameter, a microprocessor preventing an operation of the irrigation system when the irrigation system falls outside of the predetermined parameters and transmitting information to a distal computer such information comprising a calculated estimate of water actually applied at a station for a time period.

Page 8

Collins and Miller are analogous art because they are both related to a system and method of performing irrigation control.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the information, water quantities, warnings, parameters and calculations of Miller in the irrigation controller of Collins because Miller teaches a system and method for central and local cooperative control and management of irrigation by using weather data to stay within predetermined water budget restrictions (col. 2 lines 54-59) and the system provides a way of balancing projected water usage against water conservation requirements (col. 6 line 31-58).

Art Unit: 2125

9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (U.S. Pat 6,402,048) in view of Miller (U.S. Pat 5,479,339) as applied to claims 10 and 23 above, and further in view of Peek et al (U.S. Pat 6,343,255).

Collins as modified by Miller teaches an irrigation controller with remote communications as recited in claims 10 and 23 above, differing from the invention as recited in claim 24 in that their combined teaching lacks wherein the information transmitted to the distal computer further includes a relationship between the calculated estimate of water actually applied at a station for a time period, and a computed ETo for the station for the time period.

Peek et al teaches wherein the information transmitted to the distal computer further includes a relationship between the calculated estimate of water actually applied at a station for a time period, and a computed ETo for the station for the time period (col. 8 lines 9-48).

Collins as modified by Miller and Peek et al are analogous art because they are both related to irrigation controllers.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the calculations of Peek et al in the irrigation controller of Collins as modified by Miller because Peek et al teaches an irrigation system that can provide accurate microclimate information from a plurality of weather stations, can receive notification if weather conditions could cause damage to crops, and receives customized information that reflects the particular crop, field configurations and weather conditions, that will assist the user with proper application of irrigation to crops, which would increase crop production and minimize crop losses (col. 3 line 58 – col. 4 lines 32).

Application/Control Number: 10/031,046 Page 10

Art Unit: 2125

10. Claim 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (U.S. Pat 6,402,048) in view of Peek et al (U.S. Pat 6,343,255) as applied to claims 10 and 25 above, and further in view of Miller (U.S. Pat 5,479,339).

Collins as modified by Peek et al teaches an irrigation controller with remote communications as recited in claims 10 and 25 above, differing from the invention as recited in claim 26 in that their combined teaching lacks wherein the irrigation operating information includes at least one of an irrigation start time, an irrigation run time, an irrigation water flow value, and an irrigation water pressure value.

Miller teaches wherein the irrigation operating information includes at least one of an irrigation start time, and irrigation run time, an irrigation water flow value, and an irrigation water pressure value (col. 3 lines 35-40, col. 5 line 41 – col. 5 line 6).

Collins as modified by Peek et al and Miller are analogous art because they are both related to irrigation controllers.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the operating information of miller in the irrigation controller of Collins as modified by Peek et al because Miller teaches a system and method for central and local cooperative control and management of irrigation by using weather data to stay within predetermined water budget restrictions (col. 2 lines 54-59) and the system provides a way of balancing projected water usage against water conservation requirements (col. 6 line 31-58).

Response to Arguments

11. Applicant's arguments filed 7/1/04 have been fully considered but they are not persuasive.

Art Unit: 2125

Regarding the comments directed to the Information Disclosure Statement. Applicant made reference to the attached copy of the IDS filed 3/12/02 with return receipt stamped 3/26/02. It should be noted that the Examiner did not find copies of these papers with the amendment filed, however the Examiner has referred to the IDS submitted 3/26/02 in the file of record. It is also noted that a duplicate IDS was submitted on 9/25/03. Each IDS lists the same 5 patents (4,396,149, 4,626,984, 5,479,339, 5,760,706 and 6,076,740), which the Examiner has considered. Pages 2 and 3 of the instant application, as identified by the Examiner in this and previous office actions, contains additional references to patents not listed on any IDS submitted by the applicant or cited by the Examiner during the prosecution of this application. It is for this reason that the improper IDS statement was made by the Examiner.

Regarding the previous drawing objection, the amendment to the specification corrected the deficiency and the objection to the drawing is withdrawn.

Regarding the claim objections, amendments to the claims have corrected the deficiencies and the objections are withdrawn.

Regarding the claim rejections under 35 USC § 112. Claim 18 was not amended and the rejection is maintained.

Regarding the claim rejections under 35 USC § 102. Applicant argues, "an important aspect of the present claims is the sending of monitoring information to the government agency". It is the Examiners position that the argument is more specific then the claim language of the independent claims. The claim recites "a communication system that exchanges monitoring information between the irrigation controller and a government agency". Applicant also points out that "exchanging information" includes sending as well as receiving. It is the Examiners

Art Unit: 2125

position that Collins clearly discloses exchanging ETo information between a government agency and the controller in col. 20 lines 34-58 using the Internet, which is considered by the Examiner to be an exchange of information. The Examiner also considers the ETo information collected by the government agency, is monitored information, because Collins states that ETo data is based upon historical data, which is inherently collected and/or monitored. Therefore, based on the disclosure of Collins, assertions by applicant and the claims as written, the arguments are not persuasive and the rejection is maintained.

Applicant goes on to argue that monitoring information is useful to government agencies, including start time, run time, flow data etc. The independent claims are void of such language and do not define the monitoring information in this way, argument not persuasive.

Applicant also states that ETo data is different from monitoring information because ETo data cannot be used to monitor water usage or create bills for customers. This argument is more specific then the claim language present in the independent claims and is not persuasive. The rejections based upon Collins are maintained.

Conclusion

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2125

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the 13. examiner should be directed to Paul L Rodriguez whose telephone number is (703) 305-7399. The examiner can normally be reached on 6:00 - 4:30 T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Paul L Rodriguez **Primary Examiner**

Art Unit 2125

PLR 9/8/04